



DX NEWS

*the magazine of the
National Radio Club*

— SINCE 1933 —

Volume 55 Issue 4 Monday, October 26, 1987

Notice something missing. DDXD-East. Bill's column never made it in Saturdays mail and we had to put this animal together Saturday instead of waiting one more day. Look for DDXD-East next week in an expanded column.

Before we get a zillion letters about the Reprint List not being too current, yep, we know that. The list is currently being updated and we should be able to post a new one around Christmas.

When you don't receive your bulletin or an NRC product that you ordered, you should let us know. But please, don't wait 6 months!! We have to research the paperwork and that takes time, less time if you let us know sooner. NRC Products should arrive at your location within 8 weeks from the time you place the order. Your DX News should be there within a day or two of the posted date on the bulletin. Especially during the weeklies, don't wait 4 or 5 weeks to let us know that your not receiving your DX News.

Disclaimer The ANARC newsletter situation is above and beyond our control here. For those that don't know, I print it for ANARC, but that is about the extent of our involvement with the newsletter. The NRC has nothing to do with the ANARC newsletter project, that is strictly my doings and its problems should not be directly or indirectly related to any NRC function or for that matter, me. Complaints about the ANARC newsletter should be sent directly to the ANARC Executive Secretary, Don Hosmer, P.O. Box 1193, Dearborn, MI 48121-1193.

DXChange column is now being done here at HQ. If you want your telephone number including in the ad, give us the times you want to be called. Be advised that the NRC is not responsible for wierdos calling you at all hours of the day or night or for what is said or not said during those calls. And speaking of stuff for sale or wanted here is one below, keep in mind that your items will be placed somewhere in the magazine and not necessarily on the front page. We just happen to have room, hi.

For Sale: SONY 2010 like new, original carton, etc. US\$250.00 postpaid in USA. UNIDEN 2021 portable US\$99.00 ppd in US. Regency 8 CH crystal scanner US\$45.00 plus postage. Also many catalogues of Radio Supplies, Late 30s thru 40s SASE for list. Also **WANTED** a good HQ-180A or HQ150 or other tube classic willing to work up a trade on above items but willing to buy. --- Fritz Mellberg, 1505 Central, Hawarden, IA 51023 eves. 712-552-2458.

LOOK INSIDE:

2....AM Switch	3....Formats	4....DDXD-West
6....Sea Gain(Tech.Article)	17....DXpedition to Jimani	20....Musings
24....Free Car Emission Check-up Locations		

AM SWITCH

Jerry Starr, c/o WHOT Radio, 4040 Simon Road, Youngstown, OH 44512

CALL LETTER CHANGES

OLD CALL:	NEW CALL:	
590 CKEY ON TORONTO	CKO	+WHOO REQUEST WAS SET ASIDE
750 *NEW NC NEW HOPE	WAUG	IN RADCLIFF SEVERAL WEEKS AGO,
1040 CIOF BC VANCOUVER	CKKY	THUS THIS STATION REMAINS WYCP
1200 WHOO KY RADCLIFF	WYCP+	AND, AS NOTED LAST WEEK, WHOO
1210 *NEW SK KINDERSLEY	CFYM	RETURNS TO IT'S FORMER HOME IN
1260 WELL MI ALBION	WALM	ORLANDO, FL ON 990 KHZ

APPLICATIONS FOR NEW STATIONS

1600 WA DUNGENESS: 5000/5000 U1 (CORRECTS PREVIOUS LISTING)

GRANTS FOR NEW STATIONS

600 IN ELLETTVILLE: 500 D3
890 OR PENDLETON: 25000 D3

APPLICATIONS FROM EXISTING FACILITIES

1090 WRBK AL FLOMATON: CITY OF LICENSE TO CANTONMENT, FL (CORRECTION)

GRANTS TO EXISTING FACILITIES


710 KKMT MT ENNIS: RELOCATE XR (NEW STATION NOT ON THE AIR YET)
1210 KPRZ CA SAN MARCOS: POWERS TO 20000/5000, ANTENNA TO U4

OTHERNESS

600 *APP IN LAWRENCE: APPLICATION FOR NEW STATION DISMISSED
640 WPDB GA ATLANTA: THIS CP NOT YET ON THE AIR WILL BECOME THE NEW WOXI AS THE OWNERS OF THIS CP WILL SWAP FACILITIES WITH EXISTING WOXI
750 WAUG NC NEW HOPE: NEW STATION IS ON THE AIR WITH SMN'S BLACK OLDIES
890 KGGN MO GLADSTONE: EXPECTED ON SOON WITH BLACK GOSPEL FOR KANSAS CITY
990 KTLE UT TOOLE: SILENT STATION BACK ON THE AIR WITH LIGHT A/C FORMAT
1130 KBMR ND BISMARCK: APPLICATION FOR MOVE TO 710 KHZ DISMISSED
1210 CFYM SK KINDERSLEY: NEW STATION IS ON THE AIR REBROADCASTING CJYM-1330
1250 WREN KS TOPEKA: STATION IS SILENT, POSSIBLY FOR GOOD
KGBU OR FLORENCE: STATION IS SILENT
1340 KCEM NM AZTEC: SILENT AS KKBK, IS BACK ON THE AIR WITH COUNTRY FORMAT
1520 WSPZ GA DOUGLASVILLE: APPLICATION FOR POWER INCREASE DISMISSED

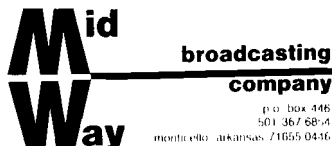
73 AND GOOD DX.

Demo & Risk
JERRY STARR & BUFFALO K. FOONMAN



KTNN
660 AM
50,000 WATTS
P.O. Box 2569
Window Rock, Arizona 86515

"NAVAJO COUNTRY FOR THE NAVAJO NATION"



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broadcasting company
p.o. box 446
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monticello, arkansas 71655 0446



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businessradio
WJBO FM 98
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583 WARREN AVENUE
PORTLAND, MAINE 04103

FORMATS

Tony Fitzherbert, 356 Jackman Avenue, Fairfield, CT 06430

Welcome to the Formats column. I have not heard from Pete Nolan for a long time, and others have written indicating that Pete may have stopped the M Street Journal. At any rate, we have lost a very valuable, and appreciated contributor. For other readers, why don't you send your format changes directly to me. Then the N.R.C. can keep you up to date on format developments as they happen. A change of format, by the way is the dropping of one basic programming approach for another, such as all news, or AC, not a change in news feed, such as "Drops NBC for SNN". Stations do that all of the time, and that is hard to keep up with. Our contributors this time are the nomadic John Malicky, who visited 49+ stations on his way to the convention, new contributor John Lovegren, Jody Hughes, and Conrad Durocher. Here is the latest...

540	WWCS	PA Canonsburg	- Ex-WARO, as of noon 9-1, all classical, "AM Stereo-540"(JM).
610	WTVN	OH Columbus	- AC, Full service for Columbus, local talk 8PM - 12M(JM).
630	WVVM	WV St. Marys	- REL, "The Valley's Voice of Worship"(JM).
740	KTRH	TX Houston	- Adds CBS, drops ABC(CD).
770	WAIS	OH Buchtel	- CWM/AC/MOR/old/ABC Directions(JM).
790	WHTH	OH Heath-Newark	- CWM, drops UPI for AP(JM).
820	WOSU	OH Columbus	- Extensive local programming, and NPR(JM).
880	WRFD	OH Worthington	- REL, farm news, 12n to 1PM, CNN(JM).
910	WBRJ	OH Marietta	- SMN CWM, "Great Country 'BRJ"(JM).
940	WCIT	OH LIMA	- adds NBC news(JM).
950	WDIG	OH Steubenville	- SMN "Pure Gold"(JM).
990	WJEH	OH Gallipolis	- AC/OLD, ABC News(JM).
1050	WADC	WV Parkersburg	- drops A(c) news(JM).
1060	WNPT	TN Newport	- CWM(JH).
1100	WWE	OH Cleveland	- Drops CBS, adds CNN/A(i)(JM).
1110	WJSM	PA Martinsburg	-GOS/REL(JM) "Where Jesus Saves Martinsburg"(TF).
1120	WYNO	OH Nelsonville	- CWM, USA news(JM).
1140	WIXC	AL Hazel Green	Adds SNN(JH).
1220	WERT	OH Van Wert	- AC(JM).
1230	WCOL	OH Columbus	- SMN Stardust, EZL, CBS(JM).
1240	KSAC	CA Sacramento	- Ex-KROY drops CHR for Classical on CD's, 24 hours(JL).
1240	WHIZ	OH Zanesville	- AC, and heavy into local sports(JM).
1270	WILE	OH Cambridge	- all live "Super Country"CWM(JM).
1300	WMVO	OH Mt. Vernon	- News/Talk and oldies, CNN(JM).
1320	WLOH	OH Lancaster	- oldies from '50's and 60's with two current hits each hour(JM).
1330	WFIN	OH Finley	- AC, drops AP for ABC news(JM).
1330	WETZ	WV New Martinville	- automated CWM, A3C news(JM).
1340	WNCO	OH Ashland	- SMN Stardust(JM).
1340	WOUR	OH Athens	- local and NPR talk, some T40, student - run Ohio University Station.(JM)
1340	WSTV	OH Steubenville	- MOR(JM).
1370	WEIF	WV Moundsville	-drops Mutual news(JM).
1390	WMPD	OH Middleport	- AC/CHR(JM).
1400	WMAN	OH Mansfield	- AC, L.King at night(JM). (JM)
1430	WFOB	OH Fostoria	- light AC, CBS News, "Northeast Ohio's Sound Companion".
1430	WCLT	OH Newark	- MOR(JM).
1440	WRGM	OH Ontario	- Automated BFL/EZL, light AC, ABC Directions(JM).
1450	WLTP	WV Parkersburg	- AC"Light and Easy"from Transtar(JM).
1460	WJYA	GA Buford	- MYL(JH).
1460	WBNS	OH Columbus	- AC/ABC and AP news, flagship station for OSU FB andBB(JM).
1460	WEEN	TN Lafayette	- CWM(JH).
1490	WMCA	OH Marietta	- EZL, lots of sports and info, "Soft Sounds along the River" (JM)
1490	WOHI	OH East Liverpool	- SMN Pure Gold(JM).
1490	WMRN	OH Marion	- MOR, Mutual(JM).
1510	WLGK	OH Logan	- AC//FM(JM).
1540	WBCO	OH Bucyrus	- light AC, drops CNN for CBS(JM).
1550	WDLR	OH Delaware	- "Super Gold"oldies form the '50's to the '80's(JM).
1560	WTNS	OH Coshocton	- AC/CHR, some //w/FM(JM).
1570	WGLX	OH Galion	- automated CWM"Your Place in the Country"(JM).
1580	WVKO	OH Columbus	- UC"The Rythm of the City"(JM).
1600	WTFH	OH Tiffin	- EZL/BB//FM(JM).
1600	WZMM	WV Wheeling	- CHR//FM, "Z-107"(JM).

And in ye editor's back ~~year~~, Westport's WMMM - 1260 has dropped that call, and is now WCF5 (For "Central Fairfield's Station). The WMMM announcers remain, and the format is still old rock. They are emphasizing coverage of five area towns including Norwalk. In Norwalk is located WNLK-1350, perhaps one of the best full service radio stations anywhere, so WCF5 is up against stiff competitor. For 'NLK, three stations in Bridgeport, and, of course, the stations in the New York City market. Is interesting. Thanks to our contributors! All for now. 73's

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④ DOMESTIC DX DIGEST - WEST

Nancy Hardy, 2301 Pacific Avenue, Aberdeen, WA 98520

This is a little better. Where was everyone last week??? Deadlines here are Saturdays. Let's hear from you!

MIDDAY TO MIDNIGHT

- 1370 KPCO CA QUINCY - 10/10 2255 atop all with 1958 oldie, then a strange tune called "Underdog" based on the TV cartoon, 2300 nice legal ID, CBS News, 2306 more oldies, 2310 several local ads. No sign of KEEN/KXTL/KAST which usually dominate at home. (BH-WA1)
- 1610 ???? WA ??? - 9/25 1445 somebody is retransmitting "KHP60 Seattle," which is National Weather Service "Noah Weatherradio" on 162.40 MHz. Noted on trip to Tacoma, strongest near waterfront. This is not City of Tacoma at exit 130, which had open carrier, nor is it the 3 Olympia-area TIS which had I-5 construction messages as usual. I'm wondering if the former Hood Canal Bridge TIS at Discovery Bay is now rebroadcasting weather info when they don't have a special message. Does anybody have any ideas on where this is? (BH-WA)

MIDNIGHT TO MIDDAY

- 630 KOH NV RENO - 10/5 0530 heard at ID time with Larry King Show (has the club published this network?), mostly under KIDO. (DL-HI1) (In the NRC AM Radio Log.--NH)
- 650 KYAK AK ANCHORAGE - 9/20 0555 occasionally topping KORL with oldies on this good north night. Needless to say, this doesn't happen in town. (DL-HI2)
- 660 KTNN AZ WINDOW ROCK - 9/20 0730 took a while to get a handle on their esoteric mix of C&W and Indian language. I'm guessing Navajo but could be Hopi I imagine. Any other nominations for a place with higher power-to-people ratio? (DL-HI2) (The language was Navajo. The station is owned by The Navajo Nation.--NH)
- CFFR AB CALGARY - 9/20 0550 some pretty deep fades on this one IDing as "FR" with oldies format. (DL-HI2)
- 700 KGRV OR WINSTON - 9/28 1005 one of the seemingly myriad W. Coast relig. broadcasters working the old clear channels ala KPLA-770, KGNW-820, KERI-1180, KPRZ-1210. Pretty solid at this hour even with KMQQ-690 slop. (DL-HI2)
- 750 KFQD AK ANCHORAGE - 9/20 0540 doing pretty well with oldies next to KGU-760. (DL-HI2)
- 770 KPLA CA RIVERBANK - 9/28 1002 ID'd as "77 West" with relig. What's the power here? (DL-HI2)
- KKOB NM ALBUQUERQUE - 9/20 0558 finally noted easily, at times, along side KGU-760 mess for NM #1. When did they add the other "K"? (DL-HI2) (About 1985 when KOB-TV split off.--NH)
- 800 CHAB SK MOOSE JAW - 10/5 0815 fair AdCon for a few minutes on a channel that doesn't produce much for me. I'll have to try this one again for a verie. It's the home of Orland Kurtenbach & other similarly obscure hockey heroes. (DL-HI1)
- 820 KGNW WA BURIEN-SEATTLE - 9/28 0530 IDing as "Eurien-Seattle," a relig. powerhouse at this hour. (DL-HI2)
- 830 WCCO MN MINNEAPOLIS-ST. PAUL - 9/20 0603 finally got a chance at this during rare KIKI SP. Doing better than WHAS-840. Pretty solid for 1/2 hour or so. (DL-HI2)
- 840 WHAS KY LOUISVILLE - 9/20 0700 one of those stations that can apparently be heard just about anywhere including CA's I-280. In weakly for 2 or 3 minutes with news. Probably waited a little too long to copy them. Was busy with WCCO-830. (DL-HI2)
- KSWP OR SPASIDE - 9/21 0907 pretty easy with KJKI-830 off but started to slide quickly after 0920. Usual morning mix of news & music. Very friendly sounding area. (DL-HI1)
- 850 KICY AK NOME - 10/5 1020 relig. followed by news at pretty good level but dropped out after 1035. AK #5 & furthest I guess. (DL-HI1)
- 880 CHQT AB EDMONTON - 10/5 0915 in briefly then swallowed by KRVN/KIXI. (DL-HI1)
- 890 KBBI AK HOMER - 10/5 0925 unn. heard at usual s/on time (+/- couple of minutes) with weather then into NPR. (DL-HI1)

- 890 CJDC BC DAWSON CREEK - 9/20 0714 satellite AdCon with some local spots plugged in, jousting with unID probably KDXU. (DL-HI2)
- 930 KRTH CA LOS ANGELES - 10/6 0230 finally, by accident while driving up the Pali Hwy. from Kailua. Like a local with oldies for CA. #65. (DL-HI)
- 990 KKIS CA PITTSBURG - 9/20 0520 rocking steady under & occasionally over local KHVH. (DL-HI2)
- 1030 KCTA TX CORPUS CHRISTI - 10/5 0800 muscled its way between KTNQ-1020 and KLHT-1040 with relig at good level. Seems odd not to have noticed them before. (DL-HI1) (They are widely heard at that time because they s/on (at Boston sunrise) with 50kw non-directional.--NH)
- 1130 KWKH LA SHREVEPORT - 9/17 0704 popped in with local spot while poking around for KMOX-1120. (DL-HI1)
- 1240 KSMA CA SANTA MARIA - 9/28 0405 jumped up out of the stew with yet another "Your oldies channel" ID. Seems no better measure of the Baby Boomers' power than the glut of oldies stations. (DL-HI2)
- 1270 KPLY NV SPARKS-RENO - 9/21 0740 oldies ID'ing as "K-Play, Sparks-Reno." In like a ton during rare KNDI SP. V/1 says directional array gives them 22kw to west. (DL-HI1)
- 1470 CJVB BC VANCOUVER - 9/21 0820 in for a few minutes on a freq. I'm having some trouble with. Caught my attention with corniest haole version of an already corny hapa-haole tune called "Hukilau." Funny considering the circumstances. (DL-HI1)
- 1550 KQWB ND WEST FARGO - 10/5 0745 unn. doing well under/over KKKI with, you guessed it, oldies. V/1 says they're directional due west at night. Must be a lot of antenna gain there. (DL-HI1)

REPORTERS
 BH-WA/Bill Hardy, Aberdeen, WA/FRG-7, Radio West loop
 EH-WA1/Bill Hardy, DXing at Ike Kinswa State Park near Mossyrock, WA/GE multi-band portable
 DL-HI1/Doug Lamerson, DXing from Makapu'u, O'ahu/car radio/antenna
 DL-HI2/Doug Lamerson, DXing from La'ie Point, O'ahu/car radio/antenna

'Nitwit' remark earns 10-day jail sentence

SPRINGFIELD, Ohio (AP) - A man serving a sentence for disorderly conduct got an additional 10 days in the slammer after he called a local radio talk show from a jail pay phone and called the judge who sentenced him a "nitwit."

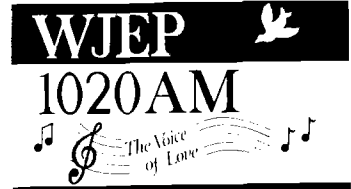
Walter Myers Jr., 53, was found in contempt of court Thursday by Municipal Court Judge Eugene S. Nevius for remarks he made Sept. 29 on a show broadcast by radio station WBLY.

Nevius said Myers showed "disrespect toward the dignity and authority of the court" by referring to him as a "nitwit" on the Smlin' Bob phone-in talk show. He also accused Myers of lying during the hearing Thursday for claiming he didn't know the remarks were being broadcast.

Myers called the show from a pay phone at the Clark County Jail, where he was serving a 30-day sentence stemming from an incident in which he spat on a police officer.

During the hearing Thursday, Myers said he did not knowingly show disrespect, and referred to "nitwit" a "non-word."

The judge accused Myers of lying under oath, said he was "disoriented," found him in contempt of court and sentenced him to 10 days in jail.



P. O. BOX 90 -- THOMASVILLE, GA 31799
 912/228-LOVE

OWNED AND OPERATED BY
 Lifeline Communications Corporation

Topeka Capital-Journal, Saturday, October 10, 1987 5



WPAZ-1370 Photo via John Malicky

SEA GAIN

Randy Seaver, Chula Vista CA, USA
Copyright (1987)

1. INTRODUCTION

Pat Martin in Seaside, Oregon hears many Trans-Pacific stations that other West Coast medium wave DXers seldom hear - gems from the Pacific Islands, the Philippines, low power Asians, and rare Australians.

Mark Connelly in Massachusetts often hears Trans-Atlantic stations that no other East Coast medium wave DXer reports - low powered Europeans, Middle East stations, exotic African stations, etc.

Richard Wood in Hawaii hears medium wave stations from all over the world - Europe, Africa, Asia, Oceania, the Americas.

What is the difference between these DXers and others? Do they have superior receivers, antennas, or other equipment? Are they more persistent than others? Are they language experts capable of picking out details that some other DXers miss? Does their location on the edge of a continent or in the middle of the ocean reduce noise levels or co-channel interference? These factors probably do contribute to their long-term success and reputation as excellent DXers.

I believe that one other factor is involved - their proximity to the sea. Each DXer mentioned above lives very close to the ocean, with an open expanse of 180 degrees or more. Most of the DX loggings of long distance, high quality medium wave receptions come from DXers who DX from near the sea, and most of their exotic receptions come from the direction of open expanse toward the ocean.

I obtained an article by Knight and Thoday (1969) entitled "Influence of the ground near transmitting and receiving aeriels on the strength of medium-frequency sky waves" (Proceedings I.E.E., volume 116, no. 6, June, 1969, pp 911-919) from Dr. Knight of the BBC several years ago. The article describes the theoretical basis of ground loss for a transmitter or receiver, the variation of ground loss with variation from the sea, and the effect of Earth curvature and irregular terrain. Some experimental data is compared with the theoretical data to validate the hypothesis that proximity to the sea enhances signal strengths of medium wave stations, especially at low elevation angles.

The abstract of the article is of interest:

" The strength of low-angle sky waves radiated by a medium-frequency aerial depends on the conductivity of the ground extending for many wavelengths in the direction of propagation. The field strength is greatest if the aerial radiates over open sea from the coast, and falls to a limiting value as the distance between the aerial and the sea increases. Measurements confirming the theoretical variation of field strength with distance from the sea are described, and the effects of ground and ionospheric irregularities are discussed. "

The remainder of this article will provide some of the experimental data and conclusions found in the Knight article, plus some other material found in Pokempner (1980) concerning the practical methods of calculating sea gain.

2. BACKGROUND

The conductivity of the ground near the transmitter of the medium wave station and near the receiver plays a very important part in the field strength of the station observed at the receiver. This is especially true for long distance, low elevation angle propagation of vertically-polarized waves, which is the predominant mode of reception on medium wave, according to Knight and others.

In the figures and discussion presented below (most of which is taken from Knight and Thoday (1969) and Pokempner (1980)), the relative field strength and the losses in decibels are intermingled. Figure 1 shows the relationship between relative field strength and loss in decibels. The relative field strength is 1.0 for no loss, .5 for an absolute field strength one half of the no loss value, etc. The loss in decibels is related to the relative field strength by the equation:

$$\text{dB} = 20 \log_{10} r \quad (1)$$

where r is the relative field strength. Consequently, for a relative field strength of 0.5, the dB loss is 6 dB, for $r=0.25$, the dB loss = 12 dB, for $r=0.10$, the dB loss = 20 dB.

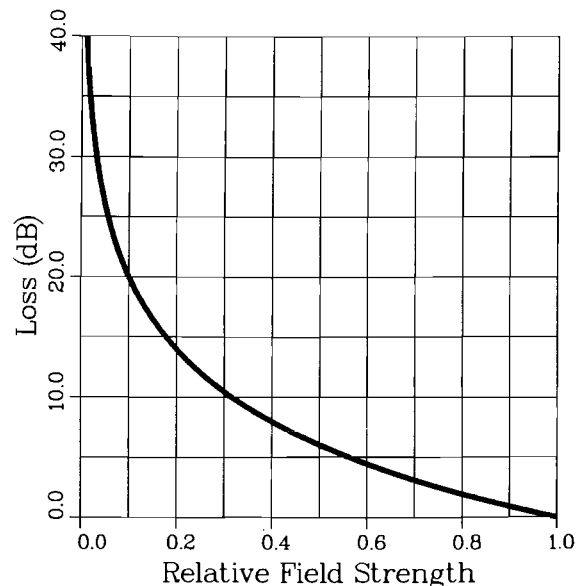


FIGURE 1. Decibel Loss vs. Relative Field Strength

Figure 2 shows the ground loss for short vertical antennas (and small loop antennas for low elevation angles) for sea water (conductivity of 4 S/m (Siemens per meter), for good ground (.01 S/m) and poor ground (.001 S/m), as a function of elevation angle to the horizontal for a wave frequency of 1 megaHertz. This data was obtained from Knight (1969) curves.

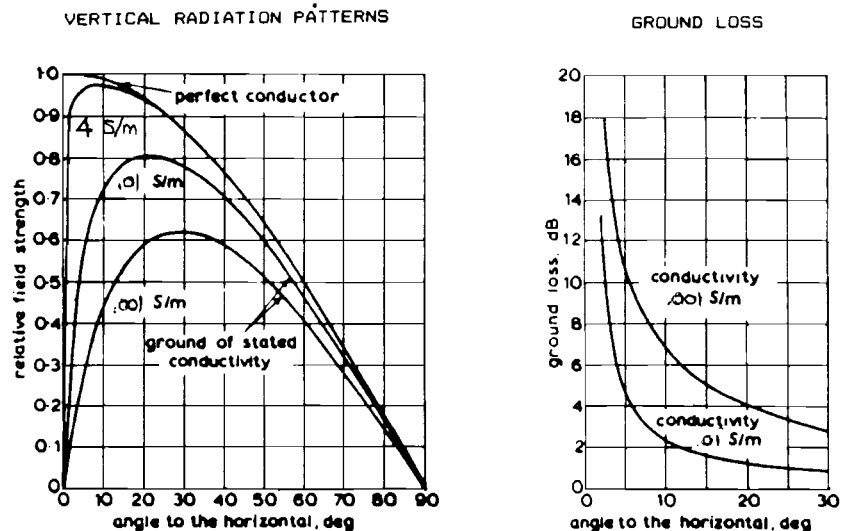


FIGURE 2. Vertical Radiation Patterns and Ground Loss for Short Antennas (Frequency = 1000 kHz)

Knight and Thoday (1969) presents the theory for a short vertical antenna a distance r from a straight coastline, as shown in Figure 3. It is immaterial whether the antenna transmits or receives because of the principle of reciprocity; the antenna length does affect the antenna gain, but that is another subject.

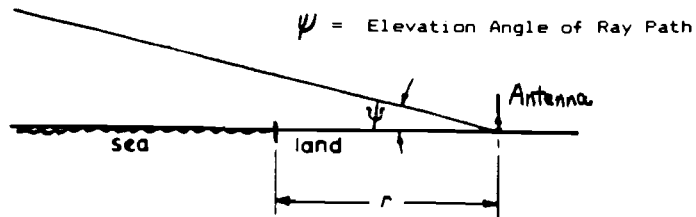


FIGURE 3. An Antenna Near a Coastline

Figure 4 shows the theoretical variation in field strength as a function of distance from the coast for four angles of arrival and for two ground conductivities (good ground, .01 S/m, and poor ground, .001 S/m). At large distances from the coast, the field strength tends to become asymptotic to the ground loss from Figure 2. It is apparent that the transition from sea to land conditions occurs over many wavelengths, especially with low angles of elevation. The potential sea gain is greatest for the lowest elevation angle and sites with poor conductivity. The theory is believed to be valid for directions within 70 degrees of the normal to the coastline, provided the distance from the coast is measured in the direction of propagation; further, it is believed to be valid for irregular coastlines. The question of hills, mountains, canyons, etc. between the antenna and the sea is not addressed in Knight and Thoday (1969). It is likely that the sea gain will be reduced by the presence of uneven ground between the antenna and the sea. This would also apply to the situation where there is land offshore; the sea gain will be reduced if there is a land - sea - land - sea path.

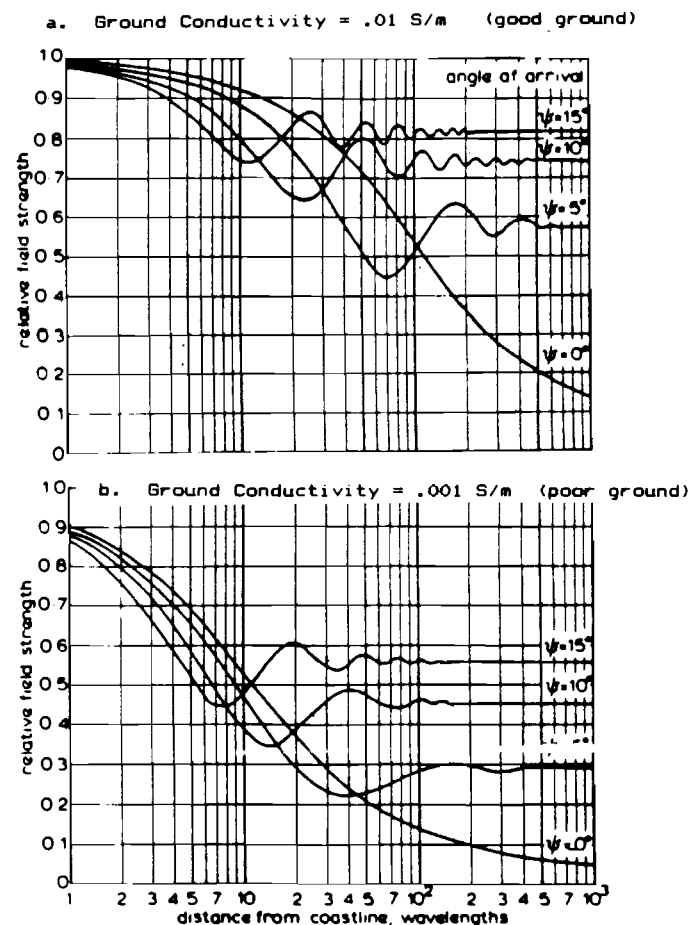


FIGURE 4. Variation of Field Strength with Distance from a Coast (Frequency = 1000 kHz)

1. EXPERIMENTAL DATA

Knight and Thoday (1969) describe an experiment conducted in Southern England along a great circle path to Rome-B45, measuring field strengths simultaneously with calibrated, identical equipment at inland and coastal sites. This eliminated most of the uncertainty resulting from differences in propagation losses due to frequency, aerial gain, ionospheric losses, etc. The Rome-B45 transmission path was selected because it was a clear channel, with a sky wave predominantly a single hop mode at a low elevation angle of about 4 degrees. Figure 5 shows a map of the receiving sites on a radial extending about 100 km inland from the coastal site at Pevensey. The ground inland is flat for a considerable distance, and there were no cliffs at Pevensey.

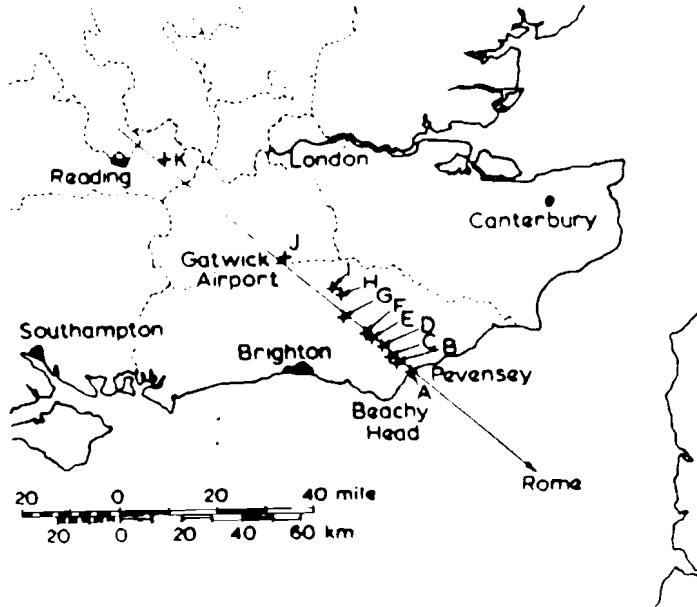


FIGURE 5. Map of Southern England Showing Measuring Sites

The field strength was measured simultaneously at the coastal site and each of the inland sites in turn and statistically correlated over one hour periods. Part of the field strength reduction observed was attributed to the greater distance of the inland sites from the transmitter, so a correction based on EBU/CCIR propagation curves were applied.

Figure 6 shows the results of the corrected measurements, and their 95% confidence limits. Theoretical curves for ground conductivities of .005 S/m and .01 S/m are also shown in Figure 6; these are believed to be the upper and lower ground conductivity limits for the area tested. Part of the theoretical curve for .02 S/m is also shown, since the first 10 km inland is a marshy area with that approximate ground conductivity. The theoretical curves are for an assumed elevation angle of 4.3 degrees, which was derived from ray-tracing computations.

NOTE: Letters refer to sites shown on Figure 5
 Vertical lines indicate 95% confidence limits
 — Theoretical ground loss
 o Measured ground loss

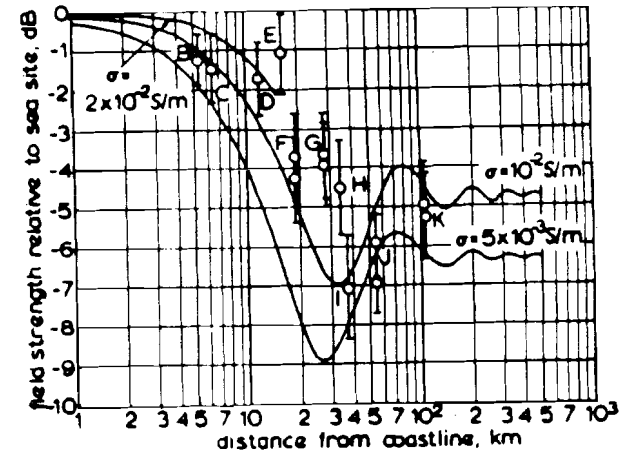


FIGURE 6. Comparison of Theoretical and Measured Ground Loss (Rome-B45 Path)

4. PRACTICAL APPLICATION

PoKempner (1980) provides some empirical relations to calculate sea gain, based on the Knight and Thoday (1969) work. The relations include the sea gain when the propagation path is unobstructed in the direction of propagation, and corrections for distance from the sea and for the effects of the width of one or more sea channels, or the presence of islands.

The additional signal gain for a transmitter or receiver near sea water (but not fresh water) is given by the equation:

$$G_s = G_0 - c_1 - c_2 \tag{2}$$

where: G_0 is the gain when the terminal is on the coast and the sea is unobstructed by land. Figure 7 defines G_0 as a function of path distance.

c_1 is the correction to take account of the distance between the terminal and the sea. The equation for c_1 is:

$$c_1 = \frac{1}{1 + \frac{s}{r}} G_0 \tag{3}$$

where s_1 is the distance of the terminal to the sea measured along the great-circle path

r_1 is the factor: $1000 G_0^2 / 1.4 (f)$

f is the wave frequency in kiloHertz.

c_2 is the correction to take account of the width of one or more sea channels, or the presence of islands. The equation for c_2 is:

$$c_2 = \left(1 - \frac{s_2^2}{r_2^2} \right) G_0 \quad (4)$$

where s_2 is the distance of the terminal to the next section of land, measured along the great circle path.

r_2 is the factor: $1000 G_0^2 / 1.2 (f)$

The equation for the c_2 factor applies if there is only one sea channel, or if more than half the distance between s_1 and a great circle distance equal to r_2 is occupied by land. If less than half the distance between s_1 and r_2 is occupied by land, then c_2 is set equal to zero.

Figure 8 shows values for the sea gain factor r_1 calculated for different values of path distance (d) and frequency. The distance r_1 is the maximum distance for any sea gain. The curves undulate due to the variation in the sea gain factor G_0 .

Figure 9 shows values for the sea gain factor r_2 calculated for different values of path distance (d) and frequency. The distance r_2 is the minimum distance for which the presence of offshore land affects the sea gain.

The total sea gain for a particular path can be calculated if the path great circle distance in kilometers, the wave frequency, the distance from the terminal to the sea and the distance of the terminal to the next section of land is known by subtracting the factors c_1 and c_2 from the basic sea gain factor G_0 .

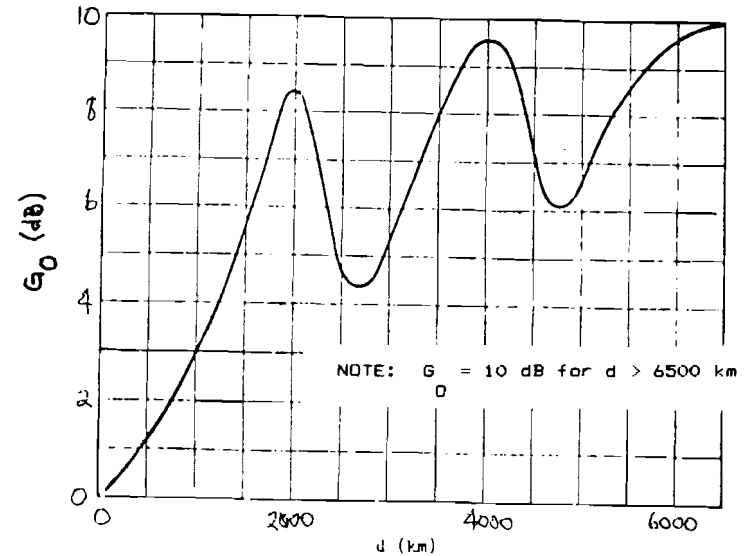


FIGURE 7. Sea Gain (G_0) for a Single Terminal on the Coast

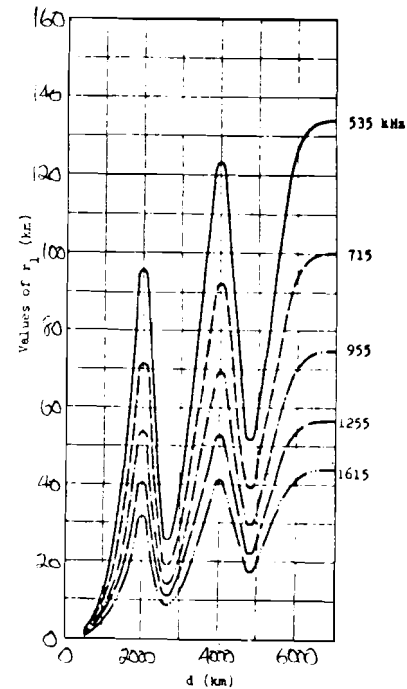


FIGURE 8. Values of r_1

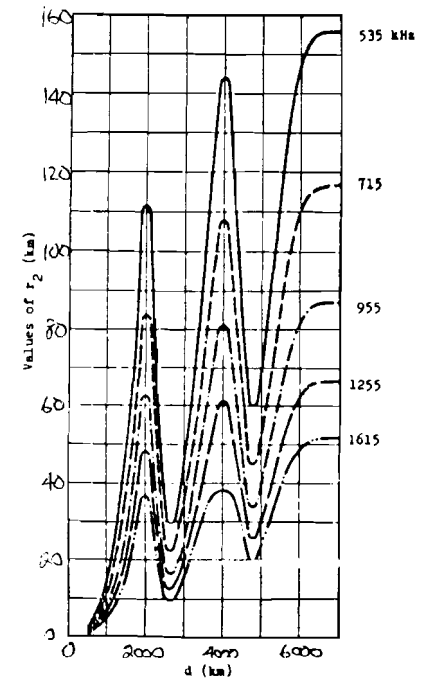


FIGURE 9. Values of r_2

The procedure for calculating the sea gain is thus:

- a) Estimate the basic sea gain factor G_0 from the path distance, d , from Figure 7.
- b) Estimate the distance r_1 for the given path distance (d) and the frequency from Figure 8.
- c) If there is a sea channel, then estimate the distance r_2 for the given path distance and frequency from Figure 9.
- d) Calculate the factor c_1 from equation (3) above for the distance from the antenna to the sea (s_1), r_1 and G_0 .
- e) If there is a sea channel, and the offshore land width is more than one-half of the distance r_2 , calculate the factor c_2 from equation (4) above for the distance from the antenna to the offshore land (s_2), r_2 and G_0 .
If c_2 is less than zero, then set $c_2 = 0$.
- f) Calculate the sea gain G_s from equation 2, knowing G_0 , c_1 and c_2 .

As an example, Figure 10 shows a scaled map of the San Diego area, and my location in Chula Vista. For a path to 22B-1035 in Wellington, New Zealand, the path distance is about 10,800 km on a 225 degree bearing. The distance to the sea on this bearing is about 12 km, and there is no offshore land in this direction. The estimated sea gain parameters for this path are:

$$G_0 = 10.0 \text{ dB} \quad (\text{from Figure 7 for } d=10,800 \text{ km})$$

$$r_1 = 70 \text{ km} \quad (\text{from Figure 8 for } d=10,800 \text{ km and } f=1035 \text{ khz})$$

$$s_1 = 12 \text{ km}$$

$$c_1 = (12) * (10.0) / (70) = 1.7 \text{ dB}$$

$$c_2 = 0 \text{ dB, since there is no offshore land.}$$

The sea gain is thus:

$$G_s = 10.0 - 1.7 - 0.0 = 8.3 \text{ dB}$$

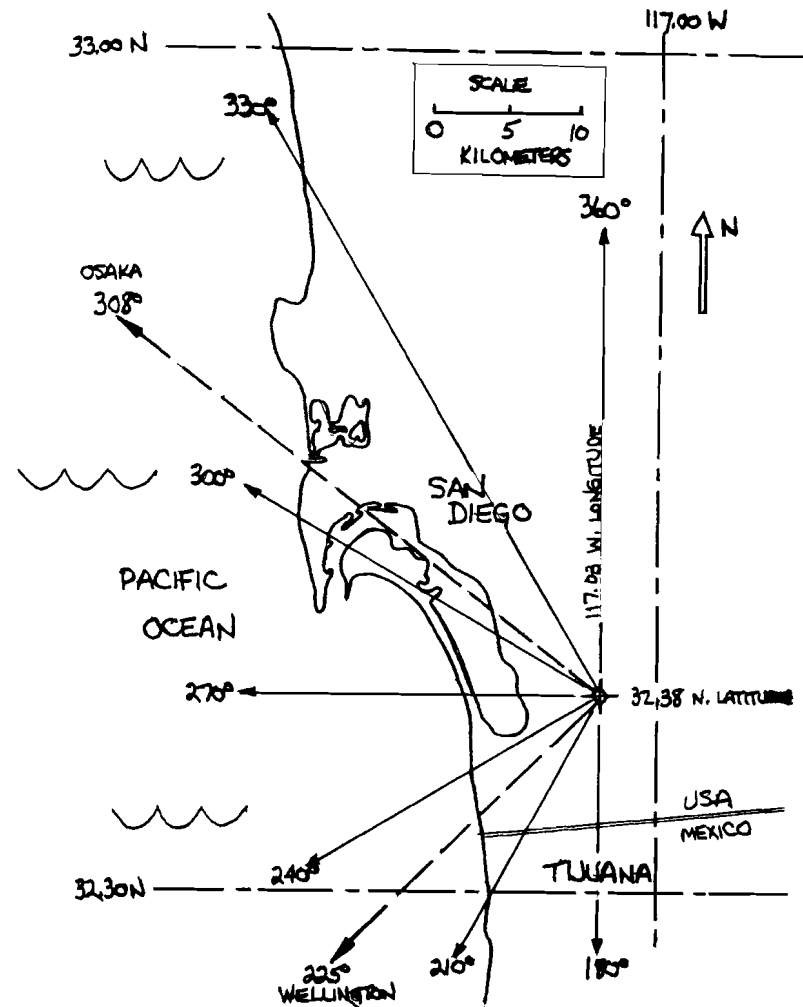


FIGURE 10. San Diego, California Map Showing Example Cases

As a second example, consider J0BB-828 in Osaka, Japan; the path distance is about 9400 km on a 308 degree bearing. The distance from my location to San Diego Bay is about 9 km on this bearing, but land is encountered at 20 km, and open ocean at 26 km. The estimated sea gain parameters are:

$$G_0 = 10.0 \text{ dB} \quad (\text{from Figure 7 for } d=9,400 \text{ km})$$

$$r_1 = 88 \text{ km} \quad (\text{from Figure 8 for } d=9,400 \text{ km and } f=828 \text{ khz})$$

$$s_1 = 9 \text{ km}$$

$$c_1 = (9) * (10.0) / (88) = 1.0 \text{ dB}$$

$$r_2 = 103 \text{ km} \quad (\text{from Figure 9 for } d=9,400 \text{ km and } f=828 \text{ khz})$$

$$s_2 = 20 \text{ km}$$

$$c_2 = (1 - 20/103) * (10.0) = 8.0 \text{ dB}$$

16 However, since the intervening land is only 6 km wide, which less than one half of r_1 , the value for c_1 is set equal to zero. The estimated sea gain is thus:

$$G_s = 10.0 - 1.0 - 0.0 = 9.0 \text{ dB}$$

A case could be made that since San Diego Bay is shallow, the sea gain should be calculated for the distance $s_1 = 26 \text{ km}$ (open sea), which results in $c_1 = 3.0 \text{ dB}$, and a sea gain of 7.0 dB.

The effects of distance from the antenna to the sea is the major factor in sea gain. The table below shows the sea gain for the Chula Vista to Osaka-828 path (assuming a variable distance and no offshore land, with $r_1 = 88 \text{ km}$):

Distance s_1 (km)	Sea Gain (dB)
0 km	10.0 dB
10 km	8.9 dB
20 km	7.7 dB
30 km	6.6 dB
40 km	5.5 dB
60 km	3.2 dB
80 km	0.9 dB

The effects of frequency are significant, as shown in the table below for the Chula Vista to Osaka path (assuming $s_1 = 26 \text{ km}$ and no offshore land):

Frequency (khz)	r_1 (km)	Sea Gain (dB)
535 khz	135 km	8.0 dB
828 khz	88 km	7.0 dB
1255 khz	57 km	5.3 dB
1610 khz	44 km	4.1 dB

It is evident from the equations, curves and examples presented above that sea gain will be highest for path distances greater than 6500 km, for antennas very near the sea, and for low medium wave frequencies, with no offshore land. Substantial sea gain can be accounted for even at distances of 40-60 km from the sea, especially at low frequencies.

5. CLOSURE

This article has described the theoretical basis for the sea gain phenomena, described some experimental data that validates the theory, and presented a practical method for estimating sea gain. All of this information was obtained from Knight and Thoday (1969) and PoKempner (1980), except for the examples. The papers should be consulted for additional background, theory and discussion if the reader desires more information. I have a limited number of the Knight and Thoday paper available for an stamped self-addressed envelope (44 cents, please).

6. REFERENCES

- Knight, P. and Thoday, R.D.C., "Influence of the ground near transmitting and receiving aeriels on the strength of medium-frequency skywaves", Proceedings I.E.E., vol. 116, no. 6, June, 1969, pp 911-919.
- PoKempner, Margo, "Comparison of Available Methods for Predicting Medium Frequency Sky-Wave Field Strength", NTIA Institute for Telecommunication Sciences, Boulder, Colo., NTIA Report 80-42, June 1980. (Available from NTIS, Accession number PB 211444)

It has been a long time I have been wishing to go to Jimani (pronounced: He-mah-NEE) the westernmost town in the Dominican Republic, with the main intention of listening to Port-au-Prince stations from the closest place in my country, without crossing the border, as it is a long time we do not receive any information from them, now when there is a change of government.

At last I saw the opportunity to become a reality when I had some talks with Franklin, a cousin of mine, who, I also discovered, is an enthusiastic in DXing and, much better, he owns a car. I found his help too valuable as I was on my way to my annual visit to cities in the country in order to keep the Dominican Republic list in the WRTU up-to-date. After some planning we set the date for departure on Saturday June 27, 1987.

We left about ten o'clock in the morning and our first stop was in Azua. We skipped San Cristobal and Baní as we already knew all about the three stations in those cities. It was in Azua where we wished to investigate a problem in which two stations were involved on one side and Telecomunicaciones on the other. It happened that Leonel Almonte, owner of HIN-1220, bought the right of the frequency in which R. Monterio-1200 operated in Azua, then he moved the frequency to Santo Domingo and operated it in 1320 under the new name of R. Universo, but R. Monterio continued in operation in Azua with a new name R. Caracol. Then Telecomunicaciones closed down the frequency of 1320 in Santo Domingo for its being an illegal station, it did not have a permission to operate from Telecomunicaciones. Before this happened the Dominican government had appointed a commission to organize the existing disorder on the airwaves in the Dominican Republic.

We continued our trip to Barahona arriving there at about two in the afternoon. We had dinner and after my cousin Franklin visited some friends we left for Jimani at 5. You haven't seen the worst roads on earth as they are here and we had to ride over them for three hours, all was dirt, gravel, stones and dust. We could not go faster than 30 kms per hour and through lonely places and deserted roads. Some thatched houses trying to be a community were seen occasionally and the poverty of the people too evident. Several times we saw some colored Haitian buses coming or sometimes going our same way but slower than us as the buses were with heavy loads of people and food bought in the Dominican Republic, usually in Santo Domingo, to be taken to Haiti. This was the usual route to Haiti.

These three hours were spent listening to recorded tapes with tangos, instrumental music, Richard Clayderman or just trying to catch some Haitian station on the car radio, most of the time we had the view of Lago Enriquillo on our right as we were riding on the southern shore of the lake. At last, almost at nightfall we came to one kilometer from Jimani but we were stopped by a small stream on a rocky riverbed but with a strong current. As our car was very small and low we did not dare at first to try to cross it, but some boys who were by the river helped us to cross by pushing the car.

We arrived at Jimani after 8 pm, already dark and went to the only hotel through the dirt streets. Yes, surprise, there as a hotel in town. We were lucky at that. But in a talk with an employee we saw we were not lucky at all. As it was "samedi soir", as mentioned very often by Haitian stations (that means "saturday night"), there was a big party at the hotel with blaring speakers at full volume and a combo rehearsing in the main hall and couples starting to arrive, beer, coke, rum, ice, being prepared for the party. We got a room with two beds but there as no water for a bath, the recent rains in the area had put the aqueduct out of order, but there as a ceiling fan which helped us to sleep. But not now. We left the hotel and went to the central park where we sat by Duarte's statue, he is our George Washington, the Father of our country, because the light used to illuminate the statue was the best. We were DXing from about 9 to 2am. I had with me my TRF and a Sanyo receiver for recording IDs or music. Franklin had a stereo set for listening to FM stations, we also tried the car radio. At 2am, we considered it was time to go to bed as we were tired from the trip.

On Sunday morning we returned to the central park and more Haitian stations were heard, especially R. Lumiere with several transmitters, R. Nationale-1080, R. Haiti-1330, R. Soleil-1170. The best of all catches was the Atlantic Beacon on Turks and Caicos Islands on 1570. We had heard this station so strong in Hato Mayor, La Romana, Santo Domingo, Barahona, that it sounded as a local station in every place and we were wondering who that might be as in this frequency in Santo Domingo there is a local station: R. Amanecer, a religious station, and the Atlantic Beacon is also a religious station but its programs are all in English and in recorded tapes with addresses in the United States, for some time I thought that the Santo Domingo station was the one playing those tapes, but here I heard the ID for the first time announcing operation with 50 kw, that is the reason why it is so strong in the whole country.

After nine a.m. we decided to start the trip back at the same speed of 30 kms per hour on dirt and gravel roads. At 16 kms from Jimani we found a beautiful spring of crystal water forming a natural pool that we could not leave it untouched. In the company of some local kids we took a bath in the shivering water. The rest

of the trip was sun, dust and heat. Our car was air-conditioned. We stopped several times for pictures this time on the northern shore of the lake as well as to listen again to MW and FM stations. Short stops at La Descubierta and Neiba and all the way back to Santo Domingo, at least on good roads on the Barahona highway, we were back home at 8 pm.

Jimani is a town of about 3,000 inhabitants and it is not more than one square kilometer, rather less. There are mountains on the north, west and south, but not very high, to the east lies Largo Enriquillo claimed to be 40 meters below sea level, so the east was widely open. Our reception place was the town central park from 8:30pm to 2:00am (0030-0600 GMT). My receiver was a TRF, very well calibrated and with new Duracell batteries. In frequencies left in blank there were stations in operation but so many of them were in the same spot that it prevented us to ID any one individually, because of that nothing is mentioned in those frequencies. Example: 1390, 1450, 1460, etc.,. After 2am all frequencies started to show clear stations but it was too late for more listening, we were tired of the trip and we had a long way back home the next day. (d) means a station heard in the daylight on Sunday morning, otherwise all were night listening. The numbers (5) means signal strength as received at the time. Here is an explanation:

- 5: Strength as a local station
4: Good, but not so strong as a local
3: Fair, relatively good strength
2: Weak, but clearly understandable
1: Very weak and noisy

While I was listening to MW
Franklin was on the FM band.
He heard very strong stations
and good stereo separation.

Here is a bandscan made at Jimani:

- 530 Rumbo, Cartago, Costa Rica (3)
540 R. ABC, S.D. (3) - R. Perija (3)
550 YVKE Mundial, Caracas (2) - Ponce (3)
560 J.B.C. (3), much better in the daylight due to no GRM
570 R. Cristal, S.D. (3) - R. Rumbos (2)
580 R. Jamaica (2)
590 R. Santa Maria, La Vega (4)
600 R. Rebelde (3)
610 R. Accion, Santiago (3)
620 R. Rebelde (2) - RTVD (d) (2)
650 R. Universal, S.D. (4) - (d) (5)
660 R. Lumiere, Port-au-Prince (5)
670 R. Rumbos, Caracas (4)
680 R. Nac. de Colombia, Zambrano (3) - R. Progreso (2)
690 Caribbean Beacon, Anguilla (3) - R. Guarachita, S.D. (2)
700 R. Popular, Maracaibo (2) - J.B.C., Montego Bay (2) - (d) (2)
710 R. Rebelde (3) - (d) WKJB, Mayaguez (2)
720 R. Jamaica, Kingston (3) - (d) R. Lumiere, Artibonite (3)
740 WIAc, San Juan, P.R. (3) - (d) R. Lumiere, Pignon le Jeune (5)
750 J.B.C., Port Maria (3) - R. Caracas (2) - (d) R. Alegre, Santiago (2) J.B.C. (2)
770 R. Aguila, Santiago (2)
780 R. Almirante, Riohacha (2) - (d) R. Lumiere, Jeremie (2)
790 R. Dif. Venezuela, Caracas (2)
800 PJB (4)
810 R. Vision 810, Valencia (2) - R. Sutatenza (2)
820 R. Santiago (3)
830 HIJB, Santo Domingo (3)
840 R. Isabel de Torres (2) - R. 4VEH, Cap Haitien (4)
850 R. Clarin, Santiago (3) - J.B.C., Old Harbour (3)
860 R. Clarin, Santo Domingo (2)
880 R. Progreso (3) - WCBS, N.Y. (2)
895 R. Trans Artibonite, Gonaives (2)(d)
900 R. Progreso (3)
910 WPRP, Ponce (3)
930 Ondas del Yuaque, Santiago (3) - R. Reloj (2)
940 WINZ, Miami (2) - R. Reloj (2)
950 R. Popular, Santo Domingo (4) - (d)(2)
960 La Voz del Atlantico, Puerto Plata (3) - R. Reloj (2) - (d) R. Carillon (4)
990 R. Mundial Tricolor, Barquisimeto (3)
1030 USA (?) (3) - (d) R. 4VEH, Cap Haitien (2) English
1060 Cuba (?) (3) - (d) R. Azua (3)
1070 Cuba (?) (3)
1080 R. Nationale, Port-au-Prince (4) - (d)(5)
1100 R. Jimani (5)
1130 R. Exitos, Santiago (4)
1150 Cuba
1170 R. Soleil, Port-au-Prince (4) - R. Eco, Medellin (3) - (d) R. Soleil (5)
1180 R. Marti, USA (3) - R. Mil, Santo Domingo (4)
1220 HIN, Santo Domingo (3) - (d)(2)
1240 R. Antilles International, Port-au-Prince (5) Too strong for 1kw as in WRTH (102)

- 1250 R. Juventud, La Romana (2)
1270 R. Reloj (3)
1280 R. Metropole, Port-au-Prince (5)
1300 R. Estudio Mil Trescientos, Petare, Venezuela (3)
1330 R. Haiti Inter, Port-au-Prince (5)
1360 Catatumbo Internacional, Maracaibo (3)
1370 La Voz de las Fuerzas Armadas, Elias Pina (d)(2)
1410 R. Neiba (d)(5)
1430 M.B.C., Port-au-Prince, (5), must be at least 10kw
1510 R. Pueblo, Santo Domingo (3)
1520 R. Bonita, Guatire, Venezuela (2)
1540 R. Recuerdos, Santo Domingo (3)
1550 R. Enriquillo, Tamayo (5)(d)
1555 R. Cayman (2)
1570 Atlantic Beacon, Turks and Caicos Island (5) (n-d)
1610 Caribbean Beacon, Anguilla (4)

North-west Europe has a new radio station - BBC 648. In a sense it was there all the time, just waiting to be introduced. Michael Kaye, BBC 648 editor, was responsible for the launch, and he explains the thinking behind the venture...



Five into 648: from left to right Bekka Nicholson, Jochen Grassanoff, Silvio Schmitt, and two other members of the new forty-strong team of announcers for the service.

Good day, guten tag, bonjour

It was back in 1985 that Ian Gilham, the head of World Service productions, expressed unease about output on the BBC's medium-wave 648kHz frequency servicing north-west Europe. He was voicing reservations already felt by others in Bush House. Instead of providing four separate services on the frequency - World Service, English by Radio, French and German - he suggested that we should "identify and promote the wavelength as a separate radio station".

That simple idea took root and finally shape last month when BBC 648 was launched. But that was just the start.

There are 380 million radio sets in the countries covered wholly or in part by 648: the Netherlands, Belgium, north-west Germany and northern France. There is also a considerable audience in south-east Britain and parts of Scotland, although this has come about by happy accident rather than design.

Ever since 1982 the BBC has broadcast on 648 using a 500 kilowatt transmitter at Orfordness on the coast of East Anglia. Because of the strength of the signal it is the obvious vehicle for the BBC's French and German language services and when these are not on the air World Service and English by Radio step into the breach.

The result is a healthy mix of programming in three of the principal languages of the area, containing international news and current affairs, music, drama, features and light entertainment. Our problem was tying the various elements together into a coherent, readily identifiable package.

To varying extents French, German and English by Radio are already tailored to the north-west European audience's requirement. But World Service is a "mainstream" service to the entire globe. It acknowledges that its key audience areas shift during the course of 24 hours but the movement of the clock across time zones can create some difficult groupings of listeners whose needs can be met only by compromise. The best time for broadcasting to

Europe is also the best time for Africa and the Middle East, for instance.

Making 648 a station in its own right serving a particular area means that the target audience can be placed within its own time frame.

Assumptions can be made about when people wake in the morning, have breakfast and travel to work. Habits of listening can be ascertained more precisely and catered for to provide a sort of trans-national "local" station.

Our principal problem was the previous discontinuity of presentation. Little warning was given about changes in language, and services collided in mid-air in an irritating way.

We decided that some form of live continuity, particularly around the French and German programmes in the morning and evening, was the answer. The announcers would always bear in mind the target audience and its needs, for example in terms of travel and weather information.

Although the preferred radio medium in the area is VHF, AM is very widely listened to. It allows a traveller driving between, say, Bonn and Brussels or Paris and Amsterdam to listen on a single frequency to relevant news throughout the journey.

The audience in north-west Europe is eager to keep abreast of the daily turn of world events and has considerable linguistic ability. Almost a quarter of West Germans speak English, for instance, as do half the Dutch and a quarter of the Belgians.

There is already a strong news and current affairs flavour to BBC 648. Indeed our news service is widely regarded as the most reliable source of information in international broadcasting. We hope, in time, to strengthen further not only this output but our cultural output as well, to satisfy the interest of the audience in north-west Europe.

We would be delighted to hear your views on our new enterprise. If you wish to write on this subject, here is a new address for you: The Editor, PO Box 648, London, England

MUSINGS

Paul Swearincaen

3132 S.E. Irvingham St., Topeka, KS 66605.

The opinions expressed in this column are those of the individual writer and do not necessarily reflect those of the Editors, Publishers, or the National Radio Club, Inc., or its subsidiaries.
Times are local per Muse.

The re-intro theme brought several members back into Musings, and that's exactly what it's supposed to do. We're glad to have you back, gentlemen.

Your next deadline, 10-31, will be aimed at NRC'ers living south of Topeka, the 11-7 deadline will be for those west of me, and the 11-14 deadline is dedicated to those living outside of the 48 states around Topeka. (Gee, it's nice moving back to the center of the nation, hi!) And when Mike publishes the deadlines for the rest of the year, we'll continue. I'll try not to screw up the December skip issue as I have the past few years (with help from the USPS). And now, on with it!

Bill Hardy - 2301 Pacific Ave. - Aberdeen, WA 98520

By my computation, it's time for the annual re-introduction issue. I am 40, became interested in AM radio in 1960, learned about DX'ing in 1964, and joined NRC in 1974 when I married Nancy, your DDxD-West editor. I work in retail sales (my sympathy, hi! -pls) at a locally-owned garden center and pet store. Favorite hobbies are DX'ing, camping, and gardening, roughly in that order, although the peak seasons for each don't overlap much.

The first new logging of the 1987-88 season has rekindled my interest. On Tue. 9-8, KJTT-1110 Oak Harbor was in strong at s/off with a full-data announcement, then the national anthem (which is getting rare around here except during sports events). They went off at 7:30 pm PDT leaving very little KBND, which surprised me because my loggings under former calls KISD were difficult. They have an AdCon format and used a "K-Jet" slogan, with the primary local audience being the Whidbey Island Naval Air Station (Charlie Taylor's home 1984-86). I wonder what KJET-1590 Seattle thinks of that!

Another new logging here Thur. 9-10 was KITZ-1400 Silverdale, WA, fair to good 7:13 pm with an oldie, probable DJ patter, local ad, promo for grandparent's contest giving KITZ address as a P. O. Box in Silverdale, KITZ jingle, more AdCon. This is the station which moved 40 miles north from Tacoma, population 150,000, to Silverdale, population 4,000. Tacoma AM is in trouble. Last year KTAC-850, proud #1 rocker of the 1970's, dumped most local staff and went satellite AdCon. KKMO-1360, ex-KAMT and pretending to have reclaimed their former three-letter call KMO, is dabbling in several things including satellite oldies and ethnic programs (the latter time-brokered). The market's flea-powered and highly directional ABC Talkradio station, KIAY-1480, is trying to move to 1180 and tie up expensive real estate with new towers, and you have to wonder, why bother?!? Tacoma AM, like Tacoma's old downtown, has old business moving out faster than new business is moving in. Meantime, Tacoma's three FM's hit rocker KNEQ, country KRPM, and BFL. KBRD, all seem to be doing well, much like the Tacoma Mall, which is now the region's largest.

One other note; Tumwater (home of Olympia Beer) now has its own station, KVSN-1500, "K-Vision," which is religious. Noted on a camping trip up there 9-12 and 9-13, uses several Moody Network satellite features and also news from the USA Radio Network. It will be difficult here 45 miles away, thanks to our local on 1490. Coming soon: "How I Spent My Summer Vacation." (I went to Vegas and lost it, hi! -pls) 73 and good DX.

Rick Evans - 1431-E 29th Avenue South - Wisconsin Rapids, WI 54494

I think the last time I reported to Musings, Ernie Cooper was still editing it. As a re-intro, I'm now 42, married, and work evenings as a rate clerk for CW Transport. I joined the NRC back in July, 1965 while living in Michigan. Since then I spent 6 years in Indiana, back to MI for four years, out near Philadelphia for nine years, and finally out here to Wisconsin Rapids this past July. So far, totals here are 148/0 from 24 states/3 provinces. Goal for the end of the year is 250/25 or 50 verified.

It's been interesting DX'ing here as opposed to the Phila. area because of the lack of local stations out here. Besides WFHR-1270 in town, the only stations within 25 miles are WXYQ-1010 and WBL-930, both daytimers. Going west from here, the first stations are 50 miles, both daytimers. Rapids is 100 miles north of Madison, WI, 40 miles south of Wausau, and 100 miles west of Green Bay, and that far north. I can only guess right now how cold it will get here this winter, but we found the heat on in this building in August. Local WFHR-1270 is on until 0207 CLT, but that doesn't affect me since I work from 1730 to 0130+ and have worked late several times. Since they pay overtime, I don't mind. WFHR has been carrying the Brewers BB games all summer, but with the high school season, they carry the local high school game and run the Brewers on tape delay Friday nights. After the games, it's Talknet and CBS news. S/off is at 0207 CT with SSB. One thing I've noticed out here is the intense competition for spots among the area stations, so you can find spots from one town on another town's station. Also, around here, Wisconsin Rapids is normally called Rapids, Stevens Point is Point, and Port Edwards is Port. If you hear it on the radio, it's a good tip-off as well as being confusing. It might have been the KWLS-1470 test in here

on 9-28, but I couldn't catch the ID, although it sure sounded like a code ID. I might as well have been sitting on the WMBD towers as well as they were coming in here! 73.

Doug Lamerson - 1777 East-West Rd. - Honolulu, HI 96848

Aloha no. It's been a while between Muses - oh, about 16 or 17 years. A case of insomnia while recently house-sitting a good location lured me back. With the exception of my brief tenure as coach of the World League N. Y. Hets, I've been out of it, so to speak, about that long. Andres, the dean of expatriate Richmond HI DX'ers and voice of Yaphank, probably knows how long exactly. Of the others, Night Train Javetski turned CA dreamin' into the vapid, radio-less reality he continues to live. Still, he recently laid out for the ICF-2002, and a couple of years back, on a visit, he let slip something like an excavation upon hearing hometown KEEN while driving through the Kawaiinui junk yard, so who knows. Cavaseno succumbed to the seductions of fashion and mounted an FM beam atop his upper W. Side redoubt, eschewing all wave lengths longer than 10 ft. Krass went the way of Terлага and Dolly Holiday (I heard she's the overnight desk clerk at the Casa Grande, AZ truck stop now) and retired upstate, having converted his HA-700 into a foot-rest.

As for me, let's just say a summons from our Commander-In-Chief in '68 initiated a curious chain of events which, whatever else may be said of them, conspired to keep me from the dials. How I ended up this far from my roots is as convoluted a tale as the distance, and the difference between egg creams and poi might suggest. I've been here about a decade now, just slightly longer it seems, than the pursuit of a Ph. D. at U. H.; a dubious undertaking rivaled in frustration perhaps only by the pursuit of a WARM QSL.

After a month and a half at this I think I can confidently say DX here is different from Queens. But, of course, we knew that back in '66 thanks to Wood, whose place in the pantheon of DX heroes was assured even then. I'd like to read those old Muses of his now. LOOKING FOR MR. GOODX: Well, I got to wondering about him after I arrived here, but it was a cold trail by then. Andres thought he'd gone off to the big sandbox someplace. Well. First 2 v/1's in here: KVEN- "We have previously received a report from the Big Island where the DX'er used an 800' antenna." KSNB- "Right after we moved to 840 kHz we were heard by Richard Wood on the Big Island." Case closed. I figure he made a bundle in Saudi or wherever, came back and bought enough land - probably SW of Hilo - to contain his antenna farm. O'ahu apparently wasn't large enough. (Not to mention the RF! -pls) I hope he's not in Pele's backyard. I envy him. Lived in Hilo for a while. Used to speculate on the best DX QTH: Volcano, Hawi, or up-country Maui. Honolulu is another story. For the unfamiliar, the city sits on a narrow coastal plain (formerly a reef) backed by a 2,000'-3,000' mountain range. This typical volcanic island topography dictates a density of transmitters that makes the city too RF hot (especially from this high-rise) for real DX without the use of more expensive equipment than I can presently lay my hands on. The solution for me is a drive over the Pali (lit. cliff) to the Windward (east) coast where conditions are, shall we say, more receptive. So it's the car radio from Kailua, Makena, or La'ie Point (the best location so far). About 200 TH from 22 states and 11 countries. Maybe I'll buy a radio eventually.

It's interesting from out here. I've noticed cx varying widely in the 6 weeks or so I've been at this. A couple of good high latitude nights indicated by the local-like presence of CJDC-890 and CFFR-860. WCAU was in on my molars for a couple of MM's in Aug. but not much lately, and several nights the Asians pretty much ran everyone but KNX and KPNW off the band. I'm curious to see if and how things stabilize during the winter. It's definitely interesting. If Wood wasn't a linguist when he got here, all these TP's probably inspired him.

Still, I doubt the dial is likely to be again as entertaining a place as when a simple receiver and a long-wire offered an introduction to the vast black world beyond the horizon from which came Wolfman's lascivious cackle; the odd, yet friendly familiarity of the Adams St. Supermarket; WHHL's sinister raspings; the innocent merriment of XELO's Record Roost menagerie, and countless other magical midnight visitors. Well, we'll see. Very friendly v/s from KPOD, KSNB. Others from KRD, KQWB, KENI, KPLY. A hui hou (till next time), aloha. (And welcome back; let's hope your next Muse is as delightful as this one, and comes over the transom in less time -pls)

Paul Swearincaen - 3132 SE Irvingham St. - Topeka, KS 66605-2948

Reintro? Why not! I'm 42, single, teaching English and journalism again, this time at Highland Park HS, and happy to be back in Kansas doing what I actually went to college to learn how to do. I've been in teaching about 12 years and out 8 1/2 over the past 20, in three states: KS, CA, and MO. During a short stint of unemployment in Jan. 1975, I had nothing else to do (in Baldwin City, KS) but to DX, which I had done only spottily for about 10 years, with a pawn shop Hallicrafters S-120. After I landed a teaching job in Moran, KS I continued to DX and spotted an ad for the NRC in **Communications World**. I mailed rje a check and soon received a DXN, which I read, fascinated, while supervising a pep club bus on its way to a basketball game. I was hooked.

Later that year I became active in Bicentennial activities and had the audacity to send Louisville a letter demanding more treatment of historical topics (which we've seen lately, thanks to Tony Fitzherbert, Tom Farmerie, and others). I actually began to Muse and send

loggings in, mostly to Chuck Hutton, and compiled my first index of a volume of DXN. When Norm Maguire died, I volunteered to edit International DX Achievements and was shocked to be picked for the job (I suspect no one else volunteered). The Lincoln and St. Louis conventions failed to dampen my enthusiasm for the hobby, and I began to join other clubs, the first being the WIFDA.

In September, 1982, I found myself in California, jobless again until November, when I suddenly found myself working one-and-one-half jobs and financially stable. Ernie and Mike were trying to find a replacement for "Musings of the Members". Through what now recognize as temporary insanity, I called Ernie and sounded him out on the editorship, and then called Mike and volunteered, with two stipulations: that IDXA be given a good home, and that bandscans be excised from the column and given a life of their own. We struck a deal, and I haven't been the same since.

I consider my experience with Musings to be the main lever which vaulted me into being a paid columnist for **Monitoring Times**, and (more importantly) both columns, plus another for IRCA, forcing me to write, or at least type. And, as I have written before, although I don't DX as much as I did before, I have been fortunate enough to meet and correspond with dozens of fine people all over the world.

I'd hope that when you NRC'ers get a little despondent over the state of the band, as compared with what you recall a few short years ago, that you remember that there is more to the NRC than DX, and that DX'ing, like music, can be another universal language in our emerging global society. 73.

No More U. S. Air, 'Ere We Go!

Ernest Cooper - 5 Anthony Street - Provincetown, MA 02657 (617) 487-9337 ELT

We're off to a good start this season, with two-for-two on veries: WXXI-1370 and WNNR-1220, v/l's both. After very few looks-in on the AM band during the summer, I was hoping perhaps to find a few of the AN'ers off, but not so one could notice it. Greed is still the #1 god of not only broadcasters, but of real estate and rentals here in Provincetown, precluding the possibility of a Provincetown Convention. I doubt you'd feature paying \$100 a night for a room, hi! I enjoyed both the IRCA and the NRC Conventions. The IRCA may hold its future conventions over Columbus Day weekend instead of in mid-August as now, in the hope of attracting more attendees. My personal thanks to Fred Vobbe for driving the 89-or-so miles both to pick me up and to get me back to the nearest commercial airport, in Dayton. Our luck on the return flights wasn't so good. I had to change planes in Pittsburgh, where it was raining, and the flight from there to Boston was delayed an hour due to a faulty windshield wiper on the plane! We arrived in Boston four minutes AFTER the last flight to Provincetown had taken off. But they told me at the counter they still had a flight going to Hyannis and would accept my Provincetown ticket on that plane, so knowing there was a bus from Hyannis to Provincetown at 7:45 pm, I took that flight and got to Hyannis at 7:39 pm - then a dash to the taxi stand a swoosh-type trip to the bus depot, and I caught it by one minute! So the dirty bird award for 1987 goes to U. S. Air. The NRC "Swat Team" stayed by themselves at the Convention, not making the tours with the rest of us, making trips of their own. One of them actually spoke to me, saying, "Hello, Ernie." A bit of DX: MM 9-14: With WBAL-1090 silent, an FF-speaking mostly all-talk station was heard but not ID'ed. WBAL was also off the next morning and the Frenchie was there again, still unID'ed. 9-17: WBAL was still off. MM 9-21: WOR-710 off, but WBAL was back on. On 790, CKSO was pounding against WWAZ-RI and CFJR-930 was loud on the first day of a new Canadian satellite network show "Nightcap." Where are you, Herb Jepko? Wed. 9-23: WNNR-1220 CT poking through WGAR/CKCW, all oldies. WLUP-1000 seems off every MM now; on MM 9-27, a loud 500-cycle het on WHAM's ow side, undoubtedly Fidel Fiddling around. Who's the Country Music net station behind WCMB nightly - WEMR, hopefully? Heard 10-4 and 10-5. WBAL off again 10-5. Forward - March!

Roger Winsor - 727 Wisconsin St. - Hobart, IN 46342 (219) 942-1055

Hello to all from NW Indiana. It has been several months since I last graced these Musings, so here goes. Total hrd at 2996, vfd at 1222. DX in the last few months has been a bit paltry, mostly due to much work, static, etc. DX in May yielded WJLA-1170 MI 0525 with XIA nonID. I have now heard this bird on 1180, so they have moved. WKGX-1080 NC at 0500 s/on, ment. "K-Cy". On 6-4 WJCM-990 MI hrd at 0430 going into "Focus On the Family", hrd several times since. 6-24: CKJD-1110 ON finally 0430 with local Sarnia ad. 7-16: WJMT-620 KY now on with nite power, and a semi-regular pest with "62 Country" WJMT ID's. Also hrd, in Champaign just this last weekend. Finally, on 9-26 KYOO-1200 logged o/u WBCE at 7:54 am with local contest winner mentioned, mucho WJMO sloop when playing mx. So sorry not to be able to make the Lima convention, but Milwaukee in '88 will be a real possibility. (Ditto -pls) BIG news in my life since the last time is that my wife and I were re-married, by my father, a retired minister, in my friend's back yard on 8-11-87, the day that would have been our 25th anniversary, and we have bought a house. (That's the kind of news I like to hear, Roger. Congrats to you both -pls)

I am in the process of setting up the garage corner for a DX den. My SX-71 works fairly well. I would appreciate hearing from someone about setting up a longwire antenna,

or something. I don't know how to properly install one. Locally, WEAW-1330 changes from 101.0 to AC 10-5 and calls to WSSY. They are having \$\$\$ problems, as they don't serve Chicago well at all. WAKE-1500 has gone back to an automated AOR oldies format, lots of dead air, ex "talk of NW Indiana". Nothing new heard on 910 concerning WLIJ, Cassopolis, MI, just WJMT when travelling over in that area a couple of weeks ago. Ditto on WJMW-1030 Vernon Hills, IL. FM DX this summer was a blast on 6-29 with 23 new ones heard, the best being KBNL-103.9 CO while nulling semi-local WJWJ out. Total FM at 970. I am again counting FM totals now that I am back for good in Hobart. God Bless and see you in **DX News** again. Welcome back to the midwest, Paul. (Thanks -pls) 73 DEE Roger ...

Ken Onyschuk - 9739 Oak Park Ave. - Oak Lawn IL 60453

Welcome back to the midwest, Paul, and super groundwave cx again. (You know it! And the warm welcome by you midlanders has been echoed by Topekans, too -pls) Now my Muses will take one day less to reach you! Only DX here was on 9-28 around 6 am when I was trying for 6 am nx on WJJD-1160 on nite pattern and got lost on a small portable and ended up on 1180 and hrd mentions of Reds' BB the night before and finally WMLX-KY. Another new one. I'm not positive of my log total but I know I'm near 950. Continuing, I accidentally found out a local call letter change 9-19 when on a ride to Will Co. to buy a Joliet paper I tuned in oldies on 1510 and hrd "WNN" instead of "JRC". 2 pm ID had WNN. Robert Feder (**Sun-Times**) reported that it stands for Remember **WNN** mx. That's their business, but I don't feel a cliché was necessary. I liked the slogan "Joliet's Right Choice". Also another area change I found out by chance, WJPC-950 Chicago and WJNR-106.3 in S. sub. Lansing joined together about Labor Day, unannounced. I called "JPC" on 9-24 and was told WJNR-106.3 is simulcast on 950 am 3-10 pm. Strange to have a black radio stn, WNN, in a town that's 95% white! Next item is the NRC convention which I attended. I got there a "day late" and missed all tours, so I was on my own. The ride to Lima itself was pretty interesting. The car radio was terrible on AM, ok on FM. I finally got to pass thru Ft. Wayne. Listened to and taped all their stns. I like WJZR-140. Sorry I won't hear it again regularly. I got to Lima and only knew of WJMA-1150 and it took me awhile to discover their oldies outlet 94 WCIT, which I liked. It probably will be hard to DX for it from here, but I'll try. Convention memories - meeting DX'ers I hadn't seen since 1979 in Peoria and St. Louis. The bandscan session with Greg Ledbetter in a quiet area park, visits with John Bowker, Mike Knitter, Bob Smolarek, Paul Mount, Ernie Cooper, among others. I was somewhat disappointed at what I felt was a low turnout, but that's life. Hope to see more of you next year, maybe in Milwaukee. Also I won't forget Sat. nite's auction, highlighted by Ted Fleishaker and Frank Merrill - what a comedy team! Dave Whatnough - keep up the bumper sticker collection on your van. What a sight!! Thassit for a short while. 73. (Trivia question for next year's convention: what was the original color of Dave's van? - pls.)

Herbert Heller, K3DE - 2873 Beechwood Blvd. - Pittsburgh, PA 15217

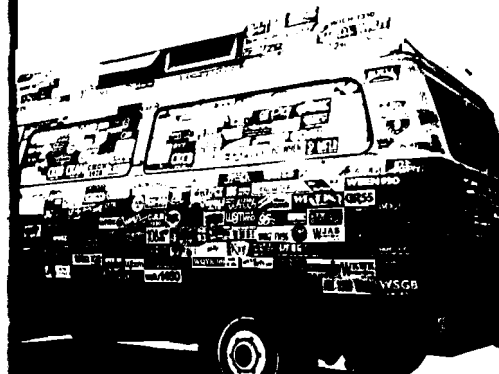
I'm excited about a new trend in AM radio - an all-classical format, 24 hours a day. WWCS-540 (formerly WARO) Canonsburg/Pittsburgh, PA has invaded the area with a good signal, quite immune from skip problems. Since public radio (FM) has gone bonkers with contemporary, non-melodic music, this is a welcome relief. (Herbert enclosed a copy of a unique ad promoting WWCS -pls)

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